

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A stent coating ~~apparatus~~ system, comprising:
 - a solvent pump that pumps a solvent ~~from~~ contained in a solvent reservoir;
 - a polymer pump that pumps a polymer ~~from~~ contained in a polymer reservoir;
 - an atomizer that atomizes the solvent and polymer; and
 - a nozzle assembly having
 - a polymer feed conduit, in fluid communication with the polymer reservoir, that dispenses the polymer,
 - a solvent feed conduit, in fluid communication with the solvent reservoir, that is not in fluid communication with the polymer feed conduit and dispenses the solvent, wherein the solvent mixes with the polymer only after the polymer and solvent are dispensed out from the nozzle assembly, and
 - an atomizing air conduit, in communication with the atomizer, that is not in fluid communication with the polymer feed conduit and the solvent feed conduit and that uses atomizer air from the atomizer to atomize the solvent and polymer that are dispensed out from the nozzle assembly;

wherein the polymer reservoir holds a polymer and drug mixture.

2. (currently amended) The ~~apparatus~~ system of claim 1, further comprising a stent mandrel fixture capable of securely supporting a stent during a coating process.
3. (currently amended) The ~~apparatus~~ system of claim 2, wherein the stent mandrel fixture is further capable of rotating or translating the stent during a coating process.
4. (currently amended) The ~~apparatus~~ system of claim 1, wherein the nozzle assembly enables external atomization of the solvent and polymer.
5. (currently amended) A stent coating ~~apparatus~~ system, comprising:
 - a solvent pump that pumps a solvent ~~from~~ contained in a solvent reservoir;
 - a polymer pump that pumps a polymer ~~from~~ contained in a polymer reservoir;
 - an atomizer that atomizes the solvent and polymer; and
 - a nozzle assembly having
 - a polymer feed conduit, in fluid communication with the polymer reservoir, that dispenses the polymer,
 - a solvent feed conduit, in fluid communication with the solvent reservoir, that is not in fluid communication with the polymer feed conduit and dispenses the solvent, wherein the solvent mixes with the polymer ~~when~~ only after the polymer and solvent are dispensed out from the nozzle assembly, and
 - an atomizing air conduit, in communication with the atomizer, that is not in fluid communication with the polymer feed conduit and the solvent feed conduit and that uses

atomizer air from the atomizer to atomize the solvent and polymer that are dispensed out from the nozzle assembly, wherein the polymer feed conduit is positioned within the solvent feed conduit such that the solvent feed conduit circumscribes the polymer feed conduit, and wherein the polymer reservoir holds a polymer and drug mixture.

6. (canceled)

7. (currently amended) The ~~apparatus of claim 6~~ system of claim 1, wherein the solvent of the solvent reservoir is a better solvent for the polymer than for the drug.

8. (currently amended) The ~~apparatus~~ system of claim 1, wherein an outlet section of the atomizing air conduit is angled relative to the polymer and solvent feed conduits.

9. (currently amended) The ~~apparatus~~ system of claim 1, wherein the solvent or polymer feed conduit extends out from the atomizing air conduit.

10. (currently amended) The ~~apparatus~~ system of claim 1, wherein the polymer feed conduit is recessed with respect to the solvent feed conduit.

11. (withdrawn) A nozzle assembly to dispense a solvent and polymer onto a stent, comprising:

a first tube to deliver a polymer composition to a stent;

a second tube disposed over the first tube to dispose a solvent completely or significantly free from drugs or polymer, such that the solvent is adapted to blend or mix with the composition when the composition and the solvent are discharged out from the nozzle; and

a third tube disposed over the second tube to atomize by air the composition and solvent that is applied to the stent.

12. (withdrawn) The nozzle assembly of claim 11, wherein the nozzle assembly enables external atomization and mixing of the solvent and polymer.

13. (withdrawn) The nozzle assembly of claim 11, wherein the polymer composition includes a drug.

14. (withdrawn) The nozzle assembly of claim 11, wherein an end of the third tube is bent towards the second tube.

15. (withdrawn) The nozzle assembly of claim 11, wherein the first or second tube protrudes out from the third tube.

16. (withdrawn) The nozzle assembly of claim 11, wherein the first tube is recessed within the second tube.

17. (withdrawn) The nozzle assembly of claim 11, wherein the tubes are made of or coated with a non-stick material.

18. (withdrawn) The nozzle assembly of claim 11, wherein the tubes have arcuate ends.

19. (withdrawn) A method of coating a stent, comprising:

positioning a nozzle assembly having a first tube to deliver a polymer composition to a stent, a second tube disposed over the first tube to dispose a solvent free from drugs or polymer, and a third tube disposed over the second tube to atomize by air the composition and solvent that is applied to the stent.;

discharging the polymer composition and the solvent from the nozzle assembly onto a stent so that the dispensed polymer composition and solvent mix when exiting the nozzle assembly; and

atomizing the solvent and polymer composition into droplets as the solvent and polymer composition are discharged out from the nozzle assembly by expelling air from the third tube in the nozzle assembly.

20. (withdrawn) The method of claim 19, wherein the solvent and polymer composition are discharged at different rates.

21. (currently amended) A stent coating ~~apparatus~~ system, comprising:

a solvent contained in a solvent reservoir;

a polymer contained in a polymer reservoir; and

a nozzle assembly having

 a polymer feed conduit that dispenses the polymer contained in the polymer reservoir,

 a solvent feed conduit that dispenses the solvent contained in the solvent reservoir, wherein the solvent and polymer mix[[es]] only after the polymer and solvent have been dispensed out from the nozzle assembly, and

 an atomizing air conduit that dispenses air to atomize the solvent and polymer only outside of the nozzle assembly after the solvent and polymer have been dispensed out from the nozzle assembly.

22. (canceled)

23. (currently amended) The ~~apparatus of claim 22~~ system of claim 21, wherein the polymer feed conduit is positioned within the solvent feed conduit such that the solvent feed conduit circumscribes the polymer feed conduit.

24. (currently amended) The ~~apparatus of claim 22~~ system of claim 21, wherein the solvent or polymer feed conduit extends out from the atomizing air conduit.

25. (currently amended) The ~~apparatus of claim 22~~ system of claim 21, wherein the polymer feed conduit is recessed with respect to the solvent feed conduit.